

WHAT IS CLAIMED IS:

1. A variable angle load-bearing connector profile for connecting a plurality of shower enclosure assembly panels, said profile comprising:

a first end segment having a first open channel sized for receiving a first flat-surfaced enclosure panel, said open channel being defined by an inner surface of each of a pair of substantially coextensive first end segment sidewalls;

a flexible middle segment attached to said first end segment; and

a second end segment attached to said middle segment and having a second open channel sized for receiving a second flat-surfaced enclosure panel, said second open channel being defined by an inner surface of each of a pair of substantially coextensive second end segment sidewalls;

said middle segment including a flexible plastic material and said end segments including at least a semi-rigid material, all three segments being co-extruded as a single integral linear unit and wherein each of said first and second end segments includes surfaces adapted to abut each other and to delimit the extent of movement of said end segments towards each other in a first sense of swivel from a linear alignment of 180° to a substantially perpendicular alignment of about 90°, wherein said flexible middle segment allows said first and second segments to repeatedly move in the first sense of swivel from the linear alignment of 180° to the substantially perpendicular alignment of about 90° and to move in a second, opposite sense of swivel away from said 180° linear alignment and away from said surfaces to form a reflex angle therebetween for accordion-like folding, storage and transport of a plurality of panels interconnected therewith, and wherein at least one of said open channels includes a plurality of flexible projections extending into said at least one of said open channels from each of the inner surfaces of the sidewalls defining said at least one of said open channels for firmly gripping a flat-surfaced panel when positioned within said at least one of said open channels.

2. The variable angle connector profile according to claim 1, wherein said middle segment is made of flexible polyvinyl chloride (PVC) and said end segments are made of at least semi-rigid PVC.

3. A variable angle connector profile according to claim 1, wherein said middle segment is made of flexible polypropylene and said end segments are made of at least semi-rigid polypropylene.

4. A variable angle connector profile according to claim 1, wherein said middle segment has an operating life enabling repeated movement in said first sense of swivel from said linear alignment of 180° to a substantially perpendicular alignment of about 90° in excess of 10,000 bend cycles.

5. A variable angle connector profile according to claim 1, further comprising retention means for releasably holding said profile at a desired angle.

6. A variable angle connector profile according to claim 1, wherein said middle segment has a thickness of between about 0.6 and 1.5 mm and a width of about 3 and 6 mm.

7. A variable angle connector profile according to claim 1, wherein said middle segment has a length of at least 1 meter.

8. A variable angle connector profile according to claim 1, wherein said middle segment has an operating life in excess of 10,000 bend cycles.

9. A variable angle connector profile according to claim 1, in combination with a door panel of said shower enclosure assembly wherein said profile forms the hinge of said door and wherein said middle segment has an operating life enabling repeated movement of said door in a first sense of swivel from the linear alignment of 180° to the substantially perpendicular alignment of about 90° in excess of 10,000 bend cycles.

10. A variable angle connector profile according to claim 1, wherein said flexible middle segment has a tensile strength of about 2750 lbs/sq. in.

11. A variable angle connector profile according to claim 1, wherein said flexible middle segment has an elongation of about 350% and a brittle point of about -29 °C.

12. A variable angle connector profile for connecting a plurality of enclosure assembly panels, said profile comprising:

a first end segment having a first open channel sized for receiving a first enclosure panel, said open channel being defined by an inner surface of each of a pair of first end segment sidewalls;

a flexible middle segment attached to said first end segment; and

a second end segment attached to said middle segment and having a second open channel sized for receiving a second enclosure panel, said second open channel being defined by an inner surface of each of a pair of second end segment sidewalls;

said middle segment including a flexible plastic material and said end segments including at least a semi-rigid material, all three segments being co-extruded as a single integral linear unit and wherein each of said first and second end segments includes surfaces adapted to abut each other and to delimit the extent of movement of said end segments towards each other in a first sense of swivel from a linear alignment of 180° to a substantially perpendicular alignment of about 90°, while said segments are free to move in a second sense of swivel away from said surfaces to form a reflex angle therebetween, for accordion-like folding, storage and transport of a plurality of panels interconnected therewith; and

retention means for releasably holding said profile at a desired angle.